

group in that family. It agrees especially with *Zoarcæ*, not only in general form, but in having all the dorsal and anal rays articulated, (excepting one in the dorsal, which possibly may be an accident in the only specimen examined,) and in having the ventral fins extremely small. On the other hand, it departs from that genus, in having the body entirely naked, and free from scales; in the two remarkable canines in front of the upper jaw, and in having teeth on the palate; also in having no notch at the posterior part of the dorsal. It is further remarkable for its large prominent eyes, and the rows of tubipores on the cheeks. Amongst the true Malacopterygians, it approaches nearest to *Ophidium*, and, but for the circumstance of its possessing ventrals, it might perhaps be ranged under that genus. It is, however, evidently a connecting link between the *Apodal Malacopterygians* and the *Blennidæ*.

Like the Blennies, this genus has neither cæcal appendages nor air-bladder. The intestinal canal is rather ample, with a few coils, but of tolerably equal dimensions throughout.

There is but one species of this new genus in the collection, which is from the Archipelago of Chiloe. The detailed description of it is as follows:—

*ILUOCÆTES FIMBRIATUS. Jen.*

PLATE XXIX. Fig. 2.

FORM.—Very much elongated, subcylindric anteriorly, compressed and ensiform behind. Greatest depth in the region of the pectorals, and about one-tenth of the entire length. Head, measured to the extreme point of the gill-cover, five and a half times in the same. The head is rather larger than any part of the body, its depth and thickness being equal, and each a trifle less than the depth of the body. Crown and forehead a little flattened, whence the profile descends in a curve before the eyes. Snout blunt and rounded, projecting, both in front and at the sides, beyond the lower jaw. Gape wide, and reaching to beneath the middle of the eye. Intermaxillary somewhat protractile at the sides, but not in front; shorter than the maxillary, with a considerable intervention of membrane between the extremities of the two bones, which are not united posteriorly, excepting by the membrane just mentioned. Maxillary long, rather slender, of nearly uniform breadth and thickness throughout, retiring in part beneath the suborbital, and reaching backwards to a vertical from the posterior part of the orbit. Intermaxillary with a single row of small, pointed, subconical, slightly curved teeth; in front of these, and quite at the anterior extremity of the jaw, two strong, hooked, regular canines;\* the teeth in the row rather wide asunder, and set a little irregularly, about thirty in number. In the lower jaw, teeth few in number, scarcely more than eight or ten in front, rather stronger than the intermaxillary series, followed by a moderate canine on each side, these last smaller than the ones above: at the sides of the lower jaw, beyond the canines, scarcely more than one or two small teeth (possibly others are fallen). A small cluster of three or four teeth on the fore part of the vomer, like those in front of the lower jaw, and a

\* One of these is gone in this specimen, but the socket in which it was implanted is obvious.

row on each palatine. Pharynx also armed with strong teeth; but the tongue, which is free at the tip, and rounded, smooth. Eyes large and prominent, and elevated rather above the line of the profile: their diameter one-fourth the length of the head; their distance from the end of the snout one diameter; the interocular space reduced to a narrow channel, and scarcely equalling half a diameter.

Opercle of a triangular form; subopercle lanceolate, projecting further than the opercle, and passing upwards and backwards to form the terminating angle of the gill-cover. Gill-opening of very moderate extent; the branchial membrane fastened down underneath, with five rays. Skin smooth and naked, loose, and probably very mucous in the living fish. Apparently no lateral line. The edges of both jaws curiously fringed each with a row of tubipores, or cutaneous appendages in the form of tubes, having pores at their terminal extremities for the exudation of mucus. The row on the upper jaw is continued along the margin of the suborbital on to the cheek; that on the lower is carried upwards to form an edging to the preopercle. There is also one of these tubipores at each nostril, another behind each eye, and a third on each side of the nape.

The dorsal commences above the terminating angle of the gill-cover, and extends the whole length of the body: its height nearly uniform throughout, equalling half the depth: the rays slender; all articulated, except the third, which is spinous, and shorter than those which precede and follow it; mostly simple, but some of the posterior ones slightly divided at their tips. Vent situate beneath the termination of the first quarter of the dorsal. The anal begins immediately behind it, and, like the dorsal, is carried on to the end of the body, to unite with it in forming a pointed caudal; all the rays soft and delicate. Pectorals rather pointed, with the middle rays longest, and about two-thirds the length of the head. Ventrals very minute and narrow, of only three rays, and appearing like one filament, about one-third the length of the pectorals; attached in front of the pectorals, and nearly in a line with the gill-opening.

B. 5; D. about 80; A. about 60; C. about 15; P. 16; V. 3.

Length 5 inc. 9 lin.

COLOUR.—Not noticed in the recent state. In spirits it is nearly colourless, with the exception of a dark bluish line along the base of the dorsal; upper part of the head, and nape, also stained with the same dark tint.

Habitat, Archipelago of Chiloe.

This species was taken by Mr. Darwin under stones. There is but one specimen in the collection, and it would be very desirable to see others, in order to ascertain whether the circumstance of the *third* dorsal ray *alone* being spinous, (those that precede as well as follow being articulated), is merely accidental in the one above described, or really characteristic of the species. If the latter, it is an anomaly,—a single spine thus occurring in the middle of a soft fin,—of which I know no other example.